Two High-Resolution Screen Dumps for the Commodore 64

Use these programs with your Commodore 64, 1541 disk drive and Commodore dot-matrix printer to print out high-res graphics you've created with LOGO, the KoalaPad or using the standard Kernal SAVE routine.

Utility for the 1515, 1525, and MPS-801 Printers

by Steve Beats, Commodore Software

This program was originally created to speed up screen dumps from LOGO, which normally can take up to 20 minutes. Using this program those same screens can be dumped in about two minutes. But we've now added a few touches that also allow you to use the program to dump screens you've saved from the KoalaPad or screens you've saved using the good old standard Kernal routines, as well.

To use the programs, first type in Binary Create and save it onto a formatted disk. Make sure you get all the data statements correct or the finished program will not work. When you have typed in this program and saved it, just type RUN and it will generate a machine code file named L10.BIN on the disk. This machine code file is used by the program 1525.Kernal.

Next type in the program 1525.Kernal and save it onto the same disk as Binary Create. You can give this program any name you like except for L10.BIN.

Use this program as is to dump Kernal screens. To use it to dump Koala screens, take out the REM at the beginning of line 170. To use it to dump LOGO screens take out the REM in line 171 and leave the REM in line 170.

To use the program, simply load the program (1525.Kernal) and

run it. The machine code section will be loaded in automatically. When the program asks you for the name of the file to print, just enter the name you used to save the picture screen. (If the screen is saved on a separate disk, remember to put that disk in the drive, first.)

After the screen has been loaded from disk you will be asked to position the paper and press the space bar to start the printing. Once the picture has been printed you can produce another copy by answering "Y" to the "ANOTHER COPY?" prompt.

Utility for the 1526 Printer

By John McKean

The program in Listing 3 allows you to dump the high-res screens you saved from LOGO, Koala or the standard Kernal routines using your 1526 printer.

To use the program for LOGO screens remove the REM in line 3001. For Koala screens remove the REM in line 3002. For standard screens, use it as is.

First, of course, type and save the program. To use it, just run the program and enter the name of the picture screen.

It takes about ten minutes for the printer to grind out a finished copy. But it's worth the wait.

-END OF TEXT-

(3 program listings attached)

PROGRAM: BINARY CREATE -->PAGE# 1

```
10 REM PROGRAM TO GENERATE A BINARY FILE
20 REM ON A FORMATTED 1541 DISK
30 :
40 REM THE DATA PRESENTED HERE WILL GENERATE
50 REM THE MACHINE CCODE PROGRAM CALLED L10.BIN
60 REM SO THAT IT CAN BE DIRECTLY LOADED IN BY
70 REM THE BASIC SECTION OF THIS SCREEN DUMP
80 REM UTILITY.
90 :
100 POKE 53281,0:POKE 53280,0:POKE 646,1
110 PRINT"[CLEAR]PLEASE INSERT THE DISK WITH THE BASIC
120 PRINT"[DOWN]PART OF THIS SCREEN DUMP UTILITY INTO
130 PRINT"[DOWN]THE DISK DRIVE AND PRESS THE SPACE BAR
135 :
140 GET A$:IF A$<>" "THEN 140   :REM WAIT FOR SPACE BAR
150 OPEN 15,8,15,"I0"          :REM INITIALISE DISK
160 PRINT#15,"S0:L10.BIN"     :REM MAKE SURE FILE IS NOT THERE
170 CLOSE 15                  :REM EVERYTHING IS READY
180 OPEN 8,8,8,"L10.BIN,P,W"  :REM OPEN PROGRAM FOR WRITE
190 PRINT#8,CHR$(0)CHR$(112);:REM START ADDRESS ($7000)
200 READ A                    :REM GET A BYTE OF ML
210 IF A<0 THEN 240           :REM GOT TO END OF DATA
220 PRINT#8,CHR$(A);          :REM WRITE OUT THE DATA
230 GOTO 200                  :REM AND REPEAT UNTIL THE END
240 CLOSE 8
250 END
260 :
270 :
280 :
290 :
1000 DATA 76,9,112,76,43,112,76,79
1010 DATA 112,162,0,142,183,2,169,128
1020 DATA 141,184,2,24,189,183,2,105
1030 DATA 64,157,185,2,189,184,2,105
1040 DATA 1,157,186,2,232,232,224,50
1050 DATA 208,233,96,169,128,133,252,160
1060 DATA 0,132,251,32,204,255,162,8
1070 DATA 32,198,255,32,228,255,145,251
1080 DATA 165,144,208,7,200,208,244,230
1090 DATA 252,208,240,32,204,255,96,169
1100 DATA 0,141,170,2,32,204,255,162
1110 DATA 4,32,201,255,169,15,141,176
1120 DATA 2,32,210,255,169,0,141,167
1130 DATA 2,141,168,2,141,171,2,173
1140 DATA 170,2,141,175,2,14,175,2
1150 DATA 10,10,109,170,2,109,175,2
1160 DATA 141,175,2,169,6,141,172,2
1170 DATA 169,7,141,173,2,173,175,2
1180 DATA 141,169,2,32,39,113,110,174
1190 DATA 2,238,169,2,206,173,2,208
1200 DATA 242,56,110,174,2,173,174,2
1210 DATA 174,172,2,157,176,2,238,167
1220 DATA 2,208,3,238,168,2,206,172
```

```
1230 DATA 2,208,205,162,5,189,177,2
1240 DATA 41,127,208,26,202,16,246,173
1250 DATA 176,2,201,15,240,8,169,15
1260 DATA 141,176,2,32,210,255,169,32
1270 DATA 32,210,255,76,248,112,173,176
1280 DATA 2,201,8,240,8,169,8,141
1290 DATA 176,2,32,210,255,162,5,189
1300 DATA 177,2,32,210,255,202,16,247
1310 DATA 238,171,2,173,171,2,201,54
1320 DATA 240,3,76,131,112,169,8,141
1330 DATA 176,2,32,210,255,169,13,32
1340 DATA 210,255,238,170,2,173,170,2
1350 DATA 201,29,240,3,76,100,112,169
1360 DATA 15,32,210,255,76,204,255,173
1370 DATA 168,2,240,9,173,167,2,201
1380 DATA 64,144,2,24,96,173,169,2
1390 DATA 201,200,176,247,173,169,2,74
1400 DATA 74,41,254,170,189,183,2,133
1410 DATA 251,189,184,2,133,252,173,167
1420 DATA 2,41,248,24,101,251,133,251
1430 DATA 173,168,2,101,252,133,252,173
1440 DATA 169,2,41,7,168,173,167,2
1450 DATA 41,7,170,177,251,61,116,113
1460 DATA 240,193,56,96,128,64,32,16
1470 DATA 8,4,2,1,-1
```

--<< END >>--

PROGRAM: 1525.KERNAL -->PAGE# 1

```
10 REM ****************************
20 REM *                          *
30 REM * KERNAL SCREEN DUMP UTILITY *
40 REM *   WRITTEN BY STEVE BEATS   *
50 REM *    BASED ON AN IDEA BY     *
60 REM *        TOM ZIEGLER         *
70 REM *                          *
80 REM ****************************
90 :
100 IF PEEK(7*4096)=76 THEN 130
110 PRINT"[CLEAR]LOADING MACHINE CODE ... PLEASE WAIT"
120 LOAD"L10.BIN",8,1
130 POKE 56,112:CLR       :REM PROTECT MACHINE CODE
140 MC=7*4096            :REM ADDRESS OF MACHINE CODE
150 SYS MC               :REM SET UP POINTERS ETC.
160 INPUT"[CLEAR]NAME OF FILE TO PRINT";A$
170 REM *KOALA*:C$=CHR$(129):IFLEN(A$)<14THENA$=A$+LEFT$("[SPACE9]",14-LEN(A$))
171 REM *LOGO* :C$="":IFRIGHT$(A$,5)<>".PIC1"THENA$=A$+".PIC1"
180 OPEN 15,8,15,"I0"    :REM INITIALISE DRIVE
190 OPEN 8,8,8,C$+A$+",P,R" :REM CHECK FILE IS THERE
200 INPUT#15,EN,ER$,TR,SE
210 IF EN=0 THEN 260     :REM FILE IS THERE OK
220 PRINT EN;ER$:PRINT"[DOWN]DISK ERROR. PRESS SPACE TO CONTINUE"
230 CLOSE 8:CLOSE 15      :REM CLOSE FILES FOR NEXT TIME AROUND
240 GET A$:IF A$<>" "THEN 240
250 GOTO 160             :REM TRY AGAIN
260 GET#8,B$,C$          :REM STRIP OFF THE START ADDRESS
270 PRINT"[DOWN]LOADING FILE. PLEASE WAIT"
280 SYS MC+3             :REM GO AND LOAD IN THE DATA
290 CLOSE 8:CLOSE 15      :REM ALL LOADED NOW
300 PRINT"[CLEAR,DOWN]"A$" IS NOW IN MEMORY"
310 PRINT"[DOWN]POSITION PAPER AND PRESS 'P' TO PRINT"
330 GET B$:IF B$<>"P"THEN 330
340 OPEN 4,4:PRINT#4:CLOSE 4
350 IF ST=-128 THEN PRINT"[DOWN]PRINTER IS NOT SWITCHED ON":FOR I=1 TO 2000:NEXT
    :GOTO 300
360 OPEN 4,4:SYS MC+6     :REM GO AND PRINT THE PICTURE
370 CLOSE 4              :REM ALL DONE
380 PRINT"[CLEAR,DOWN2]ANOTHER COPY ? (Y/N)"
390 GET B$:IF B$<>"Y"AND B$<>"N"THEN 390
400 IF B$="Y"THEN 300     :REM GO DO ANOTHER COPY
410 END
```

--<< END >>--

PROGRAM: 1526.KERNAL -->PAGE# 1

```
3000 C$=CHR$(129):INPUT"FILENAME";A$
3001 REM *LOGO*:IFRIGHT$(A$,5)<>".PIC1"THENA$=A$+".PIC1"
3002 REM *KOALA*:A$=C$+A$:IFLEN(A$)<15THENA$=A$+LEFT$("[SPACE9]",15-LEN(A$))
3010 FOR X=1 TO LEN(A$):POKE 49151+X,ASC(MID$(A$,X,1)):NEXT X:POKE X,0
4000 POKE 780,5:POKE 781,8:POKE 782,0:SYS 65466
4001 POKE 780,LEN(A$):POKE 781,0:POKE 782,192:SYS 65469
4002 POKE 780,0:POKE 781,0:POKE 782,32:SYS 65493
4005 POKE 52,32:POKE 56,32
4015 OPEN 5,4,5:OPEN 4,4
4019 COUNTER=0:BASE=8192:GOSUB 5000
4024 FOR BYTE = 0 TO 7
4026 A = PEEK(BASE+BYTE)
4028 POKE 965+BYTE,A
4030 NEXT
4032 BASE=BASE+8:IF BASE>16192 THEN CLOSE 4:CLOSE 5:END
4034 A$="":SYS 828
4036 FOR BYTE = 0 TO 7
4038 A = PEEK(973+BYTE)
4040 A$=A$+CHR$(A)
4042 NEXT
4044 PRINT#5,A$
4046 PRINT#4,TAB(COUNTER)CHR$(254)CHR$(141);
4048 COUNTER=COUNTER+1:IF COUNTER=40 THEN PRINT#4,CHR$(13):COUNTER=0
4050 GOTO 4024
5000 REM
5002 OPEN 6,4,6:PRINT#6,CHR$(10):CLOSE 6
5003 B=0:FOR DE=828 TO 980
5004 READ A
5006 POKE DE,A:B=B+A
5008 NEXT
5010 IF B<>17120 THEN PRINT"ERROR IN DATA STATEMENTS":END
5012 RETURN
6000 DATA 162,7,169,0,157,205,3,202
6010 DATA 224,255,208,248,169,128,141,196
6020 DATA 3,162,0,160,0,189,197,3
6030 DATA 10,157,197,3,32,183,3,200
6040 DATA 192,8,240,2,208,239,232,160
6050 DATA 0,224,1,240,28,224,2,240
6060 DATA 31,224,3,240,34,224,4,240
6070 DATA 37,224,5,240,40,224,6,240
6080 DATA 43,224,7,240,46,224,8,240
6090 DATA 49,169,64,141,196,3,208,197
6100 DATA 169,32,141,196,3,208,190,169
6110 DATA 16,141,196,3,208,183,169,8
6120 DATA 141,196,3,208,176,169,4,141
6130 DATA 196,3,208,169,169,2,141,196
6140 DATA 3,208,162,169,1,141,196,3
6150 DATA 208,155,96,144,10,24,185,205
6160 DATA 3,109,196,3,153,205,3,96
6170 DATA 0
6180 DATA 0,0,0,0,0,0,0,0
6190 DATA 0,0,0,0,0,0,0,0
```

--<< END >>--